

CLAIMS

1. A reporting and maintenance system for remotely monitoring or controlling devices in an enterprise, comprising:

a server group including at least one server;

at least one non-volatile memory device incorporated to said server group;

server network hardware connected to said server group, said server network hardware being configurable to provide electronic communication between said server group and a superintendent system, said server network hardware being further configurable to provide electronic communication between said server group and at least one enterprise device in communicative proximity;

first computer readable instructions installed to said memory devices, said first instructions providing the function of receiving first messages from enterprise devices in at least one enterprise management protocol;

second computer readable instructions installed to said memory devices, said second instructions providing the function of forwarding the information contained in the first messages to a superintendent system;

and third computer readable instructions installed to said memory devices, said third instructions providing the function of filtering the first messages, the filtering preventing the forwarding of some of the first messages.

2. The system of claim 1, further comprising:

fourth computer readable instructions installed to said memory devices, said fourth instructions providing the function of assigning priority to the information in said first messages;

and said second instructions provide the function of forwarding the information contained in the first messages in preferential order by the assigned priority.

3. The system of claim 1, further comprising:

fourth computer readable instructions installed to said memory devices, said fourth instructions performing the functions of:

(i) maintaining a high and a low priority queue,

(ii) sending messages from the high priority queue before messages from the low priority queue,

and (iii) deleting messages from the queues when the messages have been sent.

4. The system of claim 1, further comprising:

fourth computer readable instructions installed to said memory devices, said instructions providing the function of translating the first received messages to a second protocol.

5. The system of claim 1 wherein the first messages are communicated using version 1 of the simple network management protocol.

6. The system of claim 1 wherein the forwarding of the first messages includes transmitting the information of the first messages through a notification channel.

7. The system of claim 1 wherein the filtering of the first messages is prescribed through policy.

8. The system of claim 1, further comprising:

a gateway included in said server network hardware configurable to provide communication between said server group and a superintendent system.

9. The system of claim 1, wherein said server network hardware is configurable to provide encrypted communication between said server group and a superintendent system.

10. The system of claim 1, further comprising:

a network enabled temperature sensor, said temperature sensor positioned to monitor the temperature of the air in proximity of said server group.

11. The system of claim 1, further comprising:

a cabinet housing said server group.

12. The system of claim 11, further comprising:

a network enabled temperature sensor, said temperature sensor positioned to monitor the temperature of the air outside said cabinet.

13. The system of claim 11, further comprising:

at least one door included in said cabinet whereby access to said server group is restricted when said doors are in closed position;

locks included in said doors whereby said doors may be secured in a closed position.

14. The system of claim 13 wherein at least one of said locks may be disabled through an electronic command message from a superintendent system.

15. The system of claim 13, further comprising:

a data entry device connected to at least one of said locks, said data entry device being mounted to said cabinet, said data entry device providing a human interface external to the cabinet enclosure;

at least one of said locks may be disabled through said data entry device.

16. The system of claim 1, further comprising:

a network enabled camera whereby a space in proximity to said server group may be monitored.

17. The system of claim 1, further comprising:

an alarm in proximity to said server group.

18. The system of claim 1, further comprising:

a network enabled power controller connected to and being configurable to control the power of at least one server of said server group, said power controller being configurable to accept network commands from a superintendent system.

19. The system of claim 1, further comprising:

fourth computer readable instructions installed to said memory devices, said instructions providing the function of receiving second messages from a superintendent system, said second messages referencing at least one enterprise device;

fifth computer readable instructions installed to said memory devices, said instructions providing the function of forwarding the information in the second messages to the referenced enterprise devices.

20. The system of claim 19, further comprising:

sixth computer readable instructions installed to said memory devices, said instructions providing the function of translating the second received messages to an enterprise management protocol utilized by the referenced enterprise devices.

21. The system of claim 19 wherein the second messages are communicated using version 1 of the simple network management protocol.

22. The system of claim 19 wherein the second messages are received through a notification channel.

23. The system of claim 19, further comprising:

sixth computer readable instructions installed to said memory devices, said instructions providing the function of translating the second received messages to an enterprise management protocol utilized by the referenced enterprise devices.

24. The system of claim 1, further comprising:

enterprise devices in electronic communication with said server group through said server network hardware.

25. The system of claim 1, further comprising:

a superintendent system in electronic communication with said server group through said server network hardware.

26. The system of claim 1, further comprising:

fourth computer readable instructions installed to said memory devices, said fourth instructions providing the function of accepting network parameters that define the boundaries of an enterprise, said fourth instructions also providing the function of discovering enterprise devices through said server network hardware using the network parameters.

27. The system of claim 1, further comprising:

fourth computer readable instructions installed to said memory devices, said fourth instructions providing the function of receiving a software upgrade from a superintendent system, said fourth instructions also providing the function of delivering the software upgrade to enterprise devices.

28. The system of claim 1 wherein said server group includes two or more servers, the servers providing

redundancy.

29. A reporting and maintenance system for remotely monitoring or controlling devices in an enterprise, the devices communicating in at least one enterprise management protocols, said reporting and maintenance system comprising:

a server group including at least one server;

at least one non-volatile memory device incorporated to said server group;

server network hardware connected to said server group, said server network hardware being configurable to provide electronic communication between said server group and a superintendent system, said server network hardware being further configurable to provide electronic communication between said server group and at least one enterprise device in communicative proximity;

first computer readable instructions installed to said memory devices, said instructions providing the function of receiving status requests from a superintendent system, said requests referencing at least one enterprise device;

second computer readable instructions installed to said memory devices, said instructions providing the function of forwarding the requests to the referenced enterprise devices in at least one enterprise management protocol;

third computer readable instructions installed to said memory devices, said first instructions providing the function of receiving response messages from enterprise devices in at least one enterprise management protocol;

and fourth computer readable instructions installed to said memory devices, said second instructions providing the function of forwarding the information contained in the response messages to a superintendent system.

30. The system of claim 29, further comprising:

fifth computer readable instructions installed to said memory devices, said instructions providing the

function of translating the requests to an enterprise management protocol utilized by the referenced enterprise devices.

31. The system of claim 29, further comprising:

fifth computer readable instructions installed to said memory devices, said instructions providing the function of translating the response messages to an enterprise management protocol utilized by the superintendent system.

32. The system of claim 29 wherein communication of requests and responses to the enterprise devices is through version 1 of the simple network management protocol.

33. The system of claim 29 wherein communications of requests and responses to the superintendent system is through a notification channel.

34. The system of claim 29, further comprising:

sixth computer readable instructions installed to said memory devices, said instructions providing the function of translating the requests to an enterprise management protocol utilized by the referenced enterprise devices, said instructions further providing the function of translating the response messages to a notification channel protocol.

35. A reporting and maintenance system for remotely monitoring or controlling devices in an enterprise, comprising:

a server group including at least two servers, said servers providing redundancy of operation;

at least one non-volatile memory device incorporated to said server group;

server network hardware connected to said server group, said server network hardware including a gateway, said server network hardware being configurable to provide encrypted electronic communication

between said server group and a superintendent system through said gateway, said server network hardware being further configurable to provide electronic communication between said server group and at least one enterprise device in communicative proximity;

first computer readable instructions installed to said memory devices, said first instructions providing the function of receiving first messages from enterprise devices in at least one enterprise management protocol including version 1 of SNMP;

second computer readable instructions installed to said memory devices, said second instructions providing the function of forwarding the information contained in the first messages to a superintendent system by a notification channel in preferential order by an assigned priority;

third computer readable instructions installed to said memory devices, said third instructions providing the function of filtering the first messages, the filtering preventing the forwarding of some of the first messages, said filtering prescribed by policy;

fourth computer readable instructions installed to said memory devices, said fourth instructions providing the function of assigning priority to the information in said first messages;

fifth computer readable instructions installed to said memory devices, said instructions providing the function of translating the first received messages to a second protocol;

a cabinet housing said server group;

a first network enabled temperature sensor, said first temperature sensor positioned to monitor the temperature of the air at the interior of said cabinet;

a second network enabled temperature sensor, said second temperature sensor positioned to monitor the temperature of the air outside said cabinet;

at least one door included in said cabinet whereby access to said server group is restricted when said doors are in closed position;

locks included in said doors whereby said doors may be secured in a closed position, said locks enabled to unlock through an electronic command message from a superintendent system;

a data entry device connected to said locks, said data entry device being mounted to said cabinet,

said data entry device providing a human interface external to the cabinet enclosure; said locks enabled to be unlocked through said data entry device;

a network enabled camera whereby a space in proximity to said server group may be monitored;

an alarm in proximity to said server group;

a network enabled power controller connected to and being configurable to control the power of at least one server of said server group, said power controller being configurable to accept network commands from a superintendent system;

sixth computer readable instructions installed to said memory devices, said instructions providing the function of receiving second messages from a superintendent system through a notification channel, said second messages referencing at least one enterprise device;

seventh computer readable instructions installed to said memory devices, said instructions providing the function of translating the second received messages to an enterprise management protocol utilized by the referenced enterprise devices;

eighth computer readable instructions installed to said memory devices, said instructions providing the function of forwarding the information in the second messages to the referenced enterprise devices in at least one enterprise management protocol including version 1 of the simple network management protocol;

enterprise devices in electronic communication with said server group through said server network hardware.

a superintendent system in electronic communication with said server group through said server network hardware.

ninth computer readable instructions installed to said memory devices, said ninth instructions providing the function of accepting network parameters that define the boundaries of an enterprise, said ninth instructions also providing the function of discovering enterprise devices through said server network hardware using the network parameters;

and tenth computer readable instructions installed to said memory devices, said tenth instructions providing the function of receiving a software upgrade from a superintendent system, said tenth instructions

also providing the function of delivering the software upgrade to enterprise devices.